



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/537,279

11/21/2005

Atsuki Ishida

27691.12

1846

27683 7590 10/21/2009

HAYNES AND BOONE, LLP

IP Section

2323 Victory Avenue

Suite 700

Dallas, TX 75219

EXAMINER

BEHARRY, NOEL R

ART UNIT

PAPER NUMBER

2446

MAIL DATE

DELIVERY MODE

10/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,279	Applicant(s) ISHIDA ET AL.	
	Examiner NOEL BEHARRY	Art Unit 2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14, 21, 22 and 25-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-14, 21, 22 and 25-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is in response to applicant's response filed under 37 C.F.R. §1.111 in response to a non-final office action. Claims 4, 8, 13, 21 and 38 have been amended and claims 1-3, 15-20 and 23-24 have been canceled. Claims 4-14, 21-22 and 25-46 are subject to examination.

2. Acknowledgment is made to applicant's amendment to claim 13 to obviate previous 35 U.S.C. 112 rejection. Previously raised 35 U.S.C. 112 rejection to claim 13 is hereby withdrawn.

Response to Arguments

3. Applicant's arguments filed 06/22/2009 have been fully considered but they are not persuasive for the following reasons:

4. **Applicant's Arguments:**

Applicant argues in substance that "The server in the Internet connection system of Claims 4 and 5 at least requires the limitation of "a model identification section for determining if the client device is of a predetermined model and/or the relay device is of a predetermined model." Paragraphs 0025-0026 of Huitema, which the examiner pointed out, indicates that IPv4/IPv6 filter device 410 determines whether an IPv6 packet is encapsulated within an IPv4 packet it accepts. Huitema's device 410 can

Art Unit: 2446

make determinations on the type of a data packets: the packet being either a non-encapsulated IPv4 packet or an encapsulated IPv6 packet. However, Huitema's device 410 does not make any identification or determination of the model of a client device or a relay device or any other device.

Furthermore, Applicants respectfully disagree with the examiner's interpretation of "predetermined model". As stated on page 5 of the Office action: "Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet." Applicants believe that the term "model" for a device normally means a manufacture-specific machine type and should not be interpreted as an IP version supported by a device."

5. **Examiner's Response:**

Examiner respectfully disagrees. The claims merely recite "determining if the client device is of a predetermined model." The term model is a broad term. The applicant points to the present inventions specification, Par. 0056, to show the model referred to by the claims but the examiner submits that "It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable. *Constant v. Advanced Micro-Devices/nc.*, 7 USPQ2d 1064." Therefore the term "model" as recited in the claims is given its broadest reasonable interpretation and the examiner will not read the specification into the claims. The term is not only limited to a manufacturer model or model number but can be interpreted much broader such as general IPv4 or IPv6 models of devices.

Regarding claim 5, Applicant alleges that the IPv4/IPv6 filter device 410 of Huitema does not disconnect or limit transmission of data packets that it receives but the claim does not disclose that the server limits transmission of data packets that it receives (emphasis added). In particular, claim 5 discloses that the server limits packet transmissions but does not specify at what point that the transmissions are limited. Therefore the examiner has interpreted the limitation to mean limiting the other filter device of data packets after it is determined the type of IP packet it is. For example, for non-encapsulated IPv4 packets, the IPv4/IPv6 filter device 410 simply passes them to the IPv4 respective devices, limiting the IPv6 device from receiving any IPv4 packets.

6. Regarding claims 8 and 9 arguments presented by applicant, the arguments are substantially the same as those which have already been addressed above and in the interest of brevity; the examiner directs the applicant to those responses above.

7. **Applicant Arguments:**

Applicant argues in substance that "The Internet connection system of Claim 6 requires a server further comprising a command conversion section for converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section. The examiner rejected Claim 6 citing Col. 7, Lines 63 - Col. 8, Line 13 of Hovell. However, the cited section is related to protocol conversion used in Network Address Translation-Protocol Translation, and not related to a conversion of a command for controlling a

Art Unit: 2446

client device. An example of this command conversion section is explained in paragraph 0099 of the present application, with reference to the embodiment shown in Figure 2, as follows: "When a special command is required to manage the IPv6 terminal 2 (client device), the command setup section 22 converts a command included in the communication from the IPv6 server 7 to a command specific to the model." (Emphasis added). As explained above, Hovell does not disclose the command conversion section of Claim 6 and does not supply the required features missing from Huitema, namely, "a model identification section for determining if the client device is of a predetermined model and/or the relay device is of a predetermined model".

8. **Examiner's Response:**

Examiner respectfully disagrees. Again it should be noted the broadness of the claim language. The claim recites "converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section." However, commands being sent to a device over a network will be sent in the form of packets. Depending on the network of the source and destination devices, whether IPv4 or IPv6, the packets header will have to be converted to the receiving devices format, in this case IPv4 or IPv6. The applicant points out that the section of Hovell relied upon to teach this limitation is related to protocol conversion used in Network Address-Protocol Translation but the examiner submits that the words of the claim as currently recited does not make this distinction. This broad limitation is taught by the teachings of Hovell.

9. Regarding all other arguments presented by applicant, the arguments are substantially the same as those which have already been addressed above and in the interest of brevity; the examiner directs the applicant to those responses above.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1-5, 8-11, and 21-22** are rejected under 35 U.S.C. 102(e) as being anticipated by **Huitema et al. (Huitema hereafter)** (US 2002/0073215 A1).

Regarding claim 4,

an Internet connection system, comprising:

a relay device **(210 of Fig. 2)** connected to a client device **(200 of Fig. 2)** and provided in a first network, the first network communicated in a first protocol **(IPv6)**; **(Par. 0008-0013)** and

a server **(410 of Fig. 3)** connected to the relay device through a second network in a second protocol **(IPv4)**, **(Par. 0032)**

wherein the relay device **(210 of Fig. 2)** comprises:

a client device global address storage section for storing a global address of the client device in the first protocol; **(210 of Fig. 2) [Routers stores the address of its clients and servers in a routing table]**

a server address storage section for storing a global address of the server in the second protocol; **(210 of Fig. 2) [Routers stores the address of its clients and server in the a routing table]**

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; **(210 of Fig. 2) [Routers routes a connection based on the address stored in the routing table]** and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol, **(Par. 0008-0013)**

and

wherein the server **(410 of Fig. 3)** comprises:

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device; **(Par. 0032)**

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; **(Par. 0032)** and

a second routing device for routing a connection to the relay device based on the global address of the client device managed by the client device global address management device. **(Par. 0032)**

a model identification section for determining if the client device is of a predetermined model. **(determines whether an IPv6 packet is encapsulated within the IPv4 packet, Par. 0025)**

Regarding claim 5,

wherein the server further comprises a communication session disconnection section for limiting packet transmissions if the model identification section determines that the client device or the relay device is not of the predetermined model. **(Par. 0025-0026)** *[Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet. If it is determined that the IP packet has an IPv6 packet encapsulated then the IPv4 device is limited in getting the packet and the IPv6 device will get the packet.]*

Regarding claim 8, an Internet connection system, comprising:

a relay device **(210 of Fig. 2)** connected to a client device **(200 of Fig. 2)** and provided in a first network, the first network communicated in a first protocol **(IPv6); (Par. 0008-0013)** and

a server **(410 of Fig. 3)** connected to the relay device through a second network in a second protocol **(IPv4), (Par. 0032)**

Art Unit: 2446

wherein the relay device **(210 of Fig. 2)** comprises:

a client device global address storage section for storing a global address of the client device in the first protocol; **(210 of Fig. 2) [Routers stores the address of its clients and servers in a routing table]**

a server address storage section for storing a global address of the server in the second protocol; **(210 of Fig. 2) [Routers stores the address of its clients and server in the a routing table]**

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; **(210 of Fig. 2) [Routers routes a connection based on the address stored in the routing table]** and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol, **(Par. 0008-0013)**
and

wherein the server **(410 of Fig. 3)** comprises:

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device; **(Par. 0032)**

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay

Art Unit: 2446

device, in association with a global address of the relay device in the second protocol;

(Par. 0032) and

a second routing device for routing a connection to the relay device based on the global address of the client device managed by the client device global address management device. **(Par. 0032)**

a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined type. **(determines whether an IPv6 packet is encapsulated within the IPv4 packet, Par. 0025)**

Regarding claim 9,

wherein the server further comprises a communication session disconnection section for disconnecting communication sessions or limiting packet transmissions if the relay device is determined not of the predetermined type. **(Par. 0025-0026) [Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet. If it is determined that the IP packet has and IPv6 packet encapsulated then the IPv4 device is limited in getting the packet and the IPv6 device will get the packet.]**

Regarding claim 10,

wherein the server further comprises a state information obtaining section for obtaining at least one of location information of the client device. **(100 of Fig. 1) [Fig. 1**

Art Unit: 2446

teaches wherein the IP packet contains information about the client device such as location information (source address).]

Regarding claim 11,

wherein the state information obtaining section obtains at least one of the location information of the client device using a method according to a model of the client device. **(100 of Fig. 1) [Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]**

Regarding claim 21, an Internet connection system, comprising:

a relay device **(210 of Fig. 2)** connected to a client device **(200 of Fig. 2)** and provided in a first network, the first network communicated in a first protocol **(IPv6); (Par. 0008-0013)** and

a server **(410 of Fig. 3)** connected to the relay device through a second network in a second protocol **(IPv4), (Par. 0032)**

wherein the relay device **(210 of Fig. 2)** comprises:

a client device global address storage section for storing a global address of the client device in the first protocol; **(210 of Fig. 2) [Routers stores the address of its clients and servers in a routing table]**

a server address storage section for storing a global address of the server in the second protocol; **(210 of Fig. 2) [Routers stores the address of its clients and server in the a routing table]**

a first routing device for routing a connection from the client device through the server based on the global address of the server stored in the server address storage section; **(210 of Fig. 2) [Routers routes a connection based on the address stored in the routing table]** and

a first packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the server in the first protocol, **(Par. 0008-0013)** and

wherein the server **(410 of Fig. 3)** comprises:

a second packet processing device for capsulating/decapsulating packets, the packets being in the first protocol, using the second protocol to thereby establish a tunneling connection with the relay device; **(Par. 0032)**

a client device global address management device for managing the global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; **(Par. 0032)** and

a second routing device for routing a connection to the relay device based on the global address of the client device managed by the client device global address management device. **(Par. 0032)**

a model identification section for determining if the client device is of a predetermined model. (Par. 0025-0026)

Regarding claim 22,

wherein the relay device further comprises a communication session disconnection section for disconnecting communication sessions if the model identification section determines that the client device is not of the predetermined model. (Par. 0025-0026) *[Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet. If it is determined that the IP packet has and IPv6 packet encapsulated then the IPv4 device is disconnected in getting the packet and the IPv6 device will get the packet.]*

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 6, 25, 26, 28-31, 37-40, 43 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema** in view of **Hovell et al.** (**Hovell** hereafter) (US 7,188,191 B1).

Regarding claim 6, Huitema fails to explicitly teach,

wherein the server further comprises a command conversion section for converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section.

However, **Hovell** teaches,

wherein the server further comprises a command conversion section for converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section.

(Col 7, Line 63 – Col 8, Line 13)

Hovell teaches in the above cited portion that it is determined if the packet is IPv4 or IPv6. Depending on the version then the IP headers has to be converted in order to be sent to the device. Since to control the client device is packets being sent over the network, Examiner has interpreted this as the IP packets being translated to be accepted by the specified device.

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Hovell** in order to conform to the specification known as Network Address Translation-Protocol Translation (NAT-PT).

Regarding claim 25, Huitema teaches,

a server **(410 of Fig. 3)**, used in an Internet connection system which comprises:

a relay device **(210 of Fig. 2)** provided in a first network; and the server connected to a client device through the relay device and the Internet, the client device connected to the first network, **(Par. 0032)** comprising:

a client device address management device for managing an address of the client device connected to the relay device in association with an address of the relay device; **(Par. 0032)**

a routing device for routing a connection, the connection from the Internet to the client device, to the relay device connected to the client device based on the address of the client device managed at the client device address management device; **(Par. 0032)**

a model identification section for determining if the client device is of a predetermined model and/or the relay device is of a predetermined model; **(determines whether an IPv6 packet is encapsulated within the IPv4 packet, Par. 0025)**

Huitema fails to explicitly teach,

a command conversion section for converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section.

However, **Hovell** teaches,

a command conversion section for converting a command to be sent to the client device to a command in a predetermined format to control the client device based on results from the model identification section. **(Col 7, Line 63 – Col 8, Line 13)**

Hovell teaches in the above cited portion that it is determined if the packet is IPv4 or IPv6. Depending on the version then the IP headers has to be converted

Art Unit: 2446

in order to be sent to the device. Since to control the client device is packets being sent over the network, Examiner has interpreted this as the IP packets being translated to be accepted by the specified device.

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Hovell** in order to conform to the specification known as Network Address Translation-Protocol Translation (NAT-PT).

Regarding claim 26, further comprising:

a communication session disconnection section for limiting packet transmissions if the model identification section determines that the client device or the relay device is not of the predetermined model. **(Huitema; Par. 0025-0026) [Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet. If it is determined that the IP packet has and IPv6 packet encapsulated then the IPv4 device is limited in getting the packet and the IPv6 device will get the packet.]**

Regarding claim 28, further comprising:

a network type identification section for determining if an environment of the first network connected with the client device is of a predetermined type. **(Huitema; determines whether an IPv6 packet is encapsulated within the IPv4 packet, Par. 0025)**

Regarding claim 29, further comprising:

a communication session disconnection section for disconnecting communication sessions or limiting packet transmissions if an environment of said first network connected to the client device or the relay device is determined not of the predetermined type. **(Huitema; Par. 0025-0026) [Examiner interprets predetermined model as determining the version of the IP packet which will indicate the type of device sending the packet. If it is determined that the IP packet has and IPv6 packet encapsulated then the IPv4 device is limited in getting the packet and the IPv6 device will get the packet.]**

Regarding claim 30, further comprising:

a state information obtaining section for obtaining at least one of location information of the client device. **(Huitema; 100 of Fig. 1) [Fig. 1 teaches wherein the IP packet contains information about the client device such as location information (source address).]**

Regarding claim 31,

wherein the state information obtaining section obtains at least one the location information of the client device using a method according to a model of the client device. **(Huitema; 100 of Fig. 1) [Fig. 1 teaches wherein the IP packet contains**

information about the client device such as location information (source address).]

Regarding claim 37,

wherein the relay device is provided in the client device. **(Huitema; Par. 0036)**

Regarding claim 38, further comprising:

a packet processing device for capsulating/decapsulating packets, the packets being in a first protocol, using a second protocol to thereby establish a tunneling connection with the relay device; **(Huitema; Par. 0032)**

wherein said client device address management device a global address of the client device in the first protocol, the client device connected to the relay device, in association with a global address of the relay device in the second protocol; **(Huitema; Par. 0032)** and

a routing device for routing a connection to the relay device based on the global address of the client device managed by the client device address management device. **(Huitema; Par. 0032)**

Regarding claim 39,

wherein the first and second protocols are different. **(Huitema; Par. 0025)**

Regarding claim 40,

wherein the first and second protocols are the same. (**Huitema; Par. 0026**)

Regarding claim 43, Huitema fails to explicitly teach, further comprising:

a tunneling connection information management device for managing information of the tunneling connection between the relay device and the server, wherein

the tunneling connection information management device sends a notification to the relay device of the global address of the server in the second protocol, and sends a notification to the server of the global address of the relay device in the second protocol and of an entirety or part of the global address of the client device in the first protocol.

However, **Hovell** teaches, further comprising:

a tunneling connection information management device for managing information of the tunneling connection between the relay device and the server, wherein

the tunneling connection information management device sends a notification to the relay device of the global address of the server in the second protocol, and sends a notification to the server of the global address of the relay device in the second protocol and of an entirety or part of the global address of the client device in the first protocol.

(Col 7, Line 52 – Col 8 Line 40)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Hovell** in order to allow the source host to know the address of the destination host.

Art Unit: 2446

Regarding claim 45, further comprising:

a filtering processing device for filtering communications to/from the client device according to predetermined rules. **(Huitema; 410 of Fig. 3)**

14. **Claims 7, 12, 14, 32, 33, 36 and 41** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema** in view of **Simpson** (US 6,405,310 B1).

Regarding claim 7, **Huitema** fails to explicitly teach,

wherein the server further comprises a client device control section for controlling the client device based on results from the model identification section.

However, **Simpson** teaches,

wherein the server further comprises a client device control section for controlling the client device based on results from the model identification section. **(Simpson;**

Abstract)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Simpson** in order to manage units in a computer network.

Regarding claim 12, **Huitema** fails to explicitly teach,

wherein the server further comprises a search section for searching for the client device or the relay device based on at least one of the global address, the operation

Art Unit: 2446

state, the usage state, and the location information of the client device or the relay device.

However, **Simpson** teaches,

wherein the server further comprises a search section for searching for the client device based on at least one of the global address of the client device. **(Col 6, Lines 43-62)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Simpson** in order to discover and locate all devices connected to a network. **(Col 6, Lines 43-62)**

Regarding claim 14,

wherein the server further comprises a client device control section for controlling the client device, which selects a specific client device from the list to thereby activate a control program for the specific client device. **(Simpson; Abstract)**

Regarding claim 32, further comprising:

a client device control section for controlling the client device, **(Simpson; Abstract)**

wherein the client device control section comprises a means for displaying to a user at least one of the operation state, the usage state, and the location information of the client device. **(Simpson; Abstract)**

Regarding claim 33 and 41, this claim is substantially the same as claim 12; same rationale of rejection is applicable.

Regarding claim 36, this claim is substantially the same as claim 14; same rationale of rejection is applicable.

15. **Claims 13, 34 and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema – Simpson** in view of **Tarr** (US 6,978,314 B2).

Regarding claim 13, Huitema - Simpson fails to explicitly teach,

wherein the search section comprises a means for displaying a list of the client devices connected to each of the relay devices.

However, **Simpson** teaches,

wherein the search section comprises a means for displaying a list of the client devices connected to each of the relay devices. **(Abstract)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema – Simpson** to include the above recited limitations as taught by **Tarr** in order to improve the device search capabilities of a network management tool.

Art Unit: 2446

Regarding claim 34 and 35, this claim is substantially the same as claim 13; same rationale of rejection is applicable.

16. **Claim 42** rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema – Simpson** in view of **Zenchelsky** et al. (**Zenchelsky** hereafter) (US 6,233,686 B1)

Regarding claim 42, Huitema – Simpson fails to explicitly teach,

a connection requester authentication section for authenticating a user who requested a connection to the client device to thereby permit or deny the connection to the client device.

However, **Zenchelsky** teaches,

a connection requester authentication section for authenticating a user who requested a connection to the client device to thereby permit or deny the connection to the client device. (**Fig. 1 & Col 2, Lines 5-25**)

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema – Simpson** to include the above recited limitations as taught by **Zenchelsky** in order to implement security policy to restrict access to a network to a predetermined set of users. (**Col 2, Lines 5-25**)

17. **Claim 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema – Hovell** in view of **Zenchelsky**.

Art Unit: 2446

Regarding claim 44, Huitema - Hovell fails to explicitly teach,

the tunneling connection information management device authenticates the relay device or the server to obtain an authentication result and, if the authentication result is positive, sends the notification.

However, **Zenchelsky** teaches,

the tunneling connection information management device authenticates the relay device or the server to obtain an authentication result and, if the authentication result is positive, sends the notification. **(Fig. 1 & Col 2, Lines 5-25)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema – Hovell** to include the above recited limitations as taught by **Zenchelsky** in order to implement security policy to restrict access to a network to a predetermined set of users. **(Col 2, Lines 5-25)**

18. **Claim 46** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema** in view of **Zenchelsky**.

Regarding claim 46, Huitema fails to explicitly teach,

a filtering rule setup section for providing an interface for editing the predetermined rules.

However, **Zenchelsky** teaches,

a filtering rule setup section for providing an interface for editing the predetermined rules. **(Col 4, Lines, 23-41)**

Art Unit: 2446

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema** to include the above recited limitations as taught by **Zenchelsky** in order to allow the system administrator to formulate and load the rules into the filter.

19. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Huitema – Hovell** in view of **Tarr**.

Regarding claim 27, Huitema – Hovell fails to explicitly teach,

wherein the client device includes a peripheral device which is communicable with the relay device but cannot by itself connect to the Internet.

However, **Tarr** teaches,

wherein the client device includes a peripheral device which is communicable with the relay device but cannot by itself connect to the Internet. **(printer; Col 3, Lines 21-34)**

It would have been obvious to one of ordinary skilled in the art at the time of the invention to create the invention of **Huitema – Hovell** to include the above recited limitations as taught by **Tarr** in order to be able to connect other devices that can be connected to the network to allow other users on the network to use the device.

Conclusion

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOEL BEHARRY whose telephone number is (571)270-5630. The examiner can normally be reached on M-TH 10-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2446

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. B./

Examiner, Art Unit 2446

/Jeffrey Pwu/

Supervisory Patent Examiner, Art Unit 2446